

AMENDMENTS TO THE SPECIFICATION

In the Specification:

Please amend the specification as shown:

Please insert the following paragraph on page 1, line 4, of the specification:

--CROSS-REFERENCES TO RELATED APPLICATIONS

The present application is a 35 U.S.C. §371 national stage of PCT application PCT/JP05/06444, filed March 25, 2005, which claims priority of Japanese Application Serial Number 2004-092064, filed March 26, 2004.--

Please delete the paragraph on page 12, lines 19-22, and replace it with the following paragraph:

--Fig. 7 ~~is a graph~~ shows graphs showing the amount of ~~eytokine~~cytokines (KC and MIP-2) in a bronchoalveolar lavage fluid after an intratracheal administration of 25-H. In the graph on the left, the amount of ~~eytokine~~KC is shown in the ordinate and the time after intratracheal administration is shown in the abscissa, while in the graph on the right, the amount of MIP-2 is shown in the ordinate and the time after intratracheal administration is shown in the abscissa. • shows 25-HC, and ○ shows the control.--

Please delete the paragraph on page 16, lines 3-12 and replace it with the following paragraph:

--The protein of the present invention (preferably a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 30) is reacted with a labeled substrate peptide, and the amount of the substrate peptide decomposed (for example, fluorescence intensity) is measured, whereby the proteolysis activity is measured. As the labeled substrate peptide, use is made of, for example, a substrate peptide (for example, Nma-Pro-Lys-Pro-Leu-Ala-Nva-Trp-Lys (Dnp)-NH₂ (SEQ ID NO: 74), Nma: N-

methyl anthranilic acid etc.) labeled with a fluorescent substance (for example, fluorescamine, fluorescein isocyanate etc.). The fluorescence intensity is measured according to methods known in the art, for example a method using a fluorescence measuring apparatus.--

Please delete the paragraph on page 45, lines 14-26 and replace it with the following paragraph:

--Specifically, the compound or its salt that regulates (preferably inhibits) the activity of the protein A2 of the present invention is screened by measuring the proteolysis activity in the case (id) where the protein A2 of the present invention is reacted with a labeled substrate peptide and in the case (iid) where the protein A2 of the presence is reacted with a substrate peptide in the presence of a test compound. This reaction is carried out in a suitable buffer. By measuring the amount of the substrate peptide decomposed (for example, fluorescence intensity), the proteolysis activity is measured. As the labeled substrate peptide, use is made of, for example, a substrate peptide (for example, Nma-Pro-Lys-Pro-Leu-Ala-Nva-Trp-Lys (Dnp)-NH₂ (SEQ ID NO: 74), Nma: N-methyl anthranilic acid etc.) labeled with a fluorescent substance (for example, fluorescamine, fluorescein isocyanate etc.). The fluorescence intensity is measured according to methods known in the art, for example a method using a fluorescence measuring apparatus.--

Please delete the paragraph from page 83, line 30, to page 86, line 5, and replace it with the following paragraph:

--To reveal genes whose expression fluctuated specifically in lung tissues of COPD patients, lung tissue samples after the operation of removing the lungs from the lung cancer patients with a complication of COPD were frozen in liquid nitrogen, then milled with a frozen-tissue milling device, and immersed in Isogen (Nippon Gene) in a 10-fold excess amount relative to the wet lungs, to prepare total RNAs according to its attached protocol. Among all samples from which total RNAs were prepared, total RNAs from the NN group (5 cases), NE group (3 cases), NS group (2 cases), CE1 group (3 cases), and CE2A group (2 cases) were used as

materials, and the 15 samples in total were used in gene expression analysis with an oligonucleotide microarray (Human Genome U133A, U133B; ~~Affymetrix~~ AFFYMETRIX™). The experimental method was in accordance with an experimental guide (Expression analysis technical manual) from ~~Affymetrix~~ AFFYMETRIX™.--

In addition to the amendments to the specification recited above, please replace the sequence listing with the sequence listing submitted concurrently herewith.